

IN THE SPECIFICATION

Amend the paragraph on page 10, line 7:

First of all, the optical fiber and the optical fiber cable are described with reference to Fig. 1 though Fig. 3. As shown in Fig. 1, an optical fiber 10 according to this embodiment is generally composed of a core 12 made of solid quartz glass, having lightwave guide property and extending along one direction, a clad layer 14 covering over a peripheral surface of the core 12 with appressed thereto, and a protective layer 16 protecting the clad layer 14 with covering over a peripheral surface of the clad layer 14. As is conventional, the fiber is flexible.

Amend the paragraph on page 10, line 24:

As one feature of the present invention, the scintillator material 18, which is emitted when any of X-ray, α -ray, β -ray, and γ -ray is applied, is dispersed in the clad layer 14 by way of dope or other processors. Here the detailed description of the scintillator material 18, which is of well-known material, is abbreviated. In this embodiment, inorganic scintillator, such as NaI (TI) and CsI (TI), is applied.

Amend the paragraph on page 13, line 21:

Since the optical fiber cable 20 is configured as described above, when a radiation, such as α -ray, β -ray, and γ -ray, is applied to this optical fiber cable 20, the radiation is entered into the clad layer 14 through the gaps 26. Then the radiation makes the scintillator material 18 dispersed in the clad layer 14 emit light, as described above. This light is then transmitted within the core 12 of the optical fiber 10.